

HPI - 1K1 · HPI - 1K3

The HPI - 1K1 and HPI - 1K3 are PIN photodiodes for fiber optic receivers, mounted in a durable, hermetically sealed TO - 18 metal can package, which offer high - speed response and high output. HPI - 1K1 cathode connected to metal case. Each HPI - 1K3 lead pin is isolated from metal case.

FEATURES

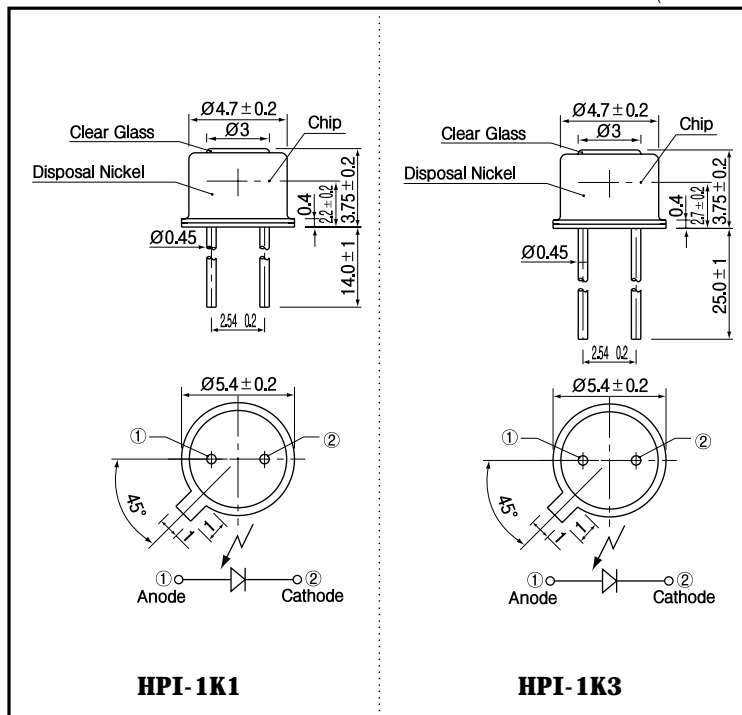
- High - output power
- High - speed response
- Durable
- High reliability in demanding environments
- Narrow angular response

APPLICATIONS

- Fiber optic communications
- Optical switches

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25)

Item	Symbol	Rating		Unit
		HPI - 1K1	HPI - 1K3	
Reverse voltage	V_R	40	40	V
Power dissipation	P_D	100	100	mW
Operating temp.	$T_{opr.}$	- 30 ~ +100	- 25 ~ +100	
Storage temp.	$T_{stg.}$	- 40 ~ +110	- 40 ~ +110	
Soldering temp. *1	$T_{sol.}$	260	260	

*1.For MAX.5 seconds at the position of 2 mm from the package

(Ta=25)

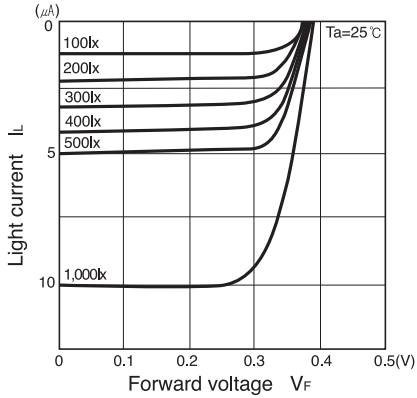
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Open circuit voltage	V_{oc}	$E_v=1,000I_x^2$		0.38		V
Short circuit current	I_{sc}			10		μA
Sensitivity	S			0.4		A/W
Dark current	I_d	$V_R=1V$			10	nA
Curve factor	C.F.		0.55			-
Capacitance	C_t	$V=0V, f=1MHz$		10		pF
Temperature coefficient of V_{oc}	t			- 2.2		mV/
Temperature coefficient of I_{sc}	t			0.18		%/
Spectral sensitivity				450 ~ 1,050		nm
Peak wavelength	p			920		nm
Half angle				± 50		deg.

*2.Color temp.=2856K standard Tungsten lamp

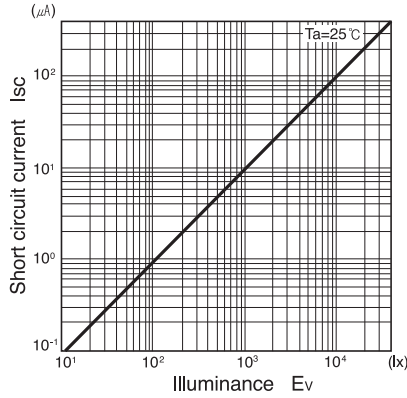
PIN Photodiode

HPI - 1K1 · HPI - 1K3

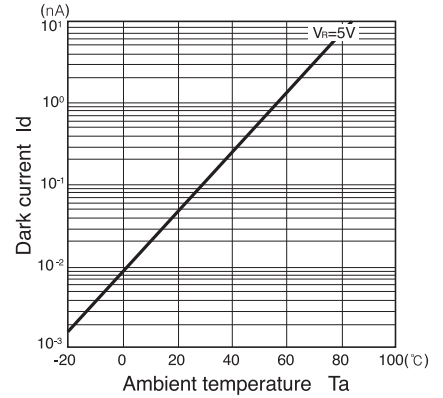
Light current Vs. Forward voltage



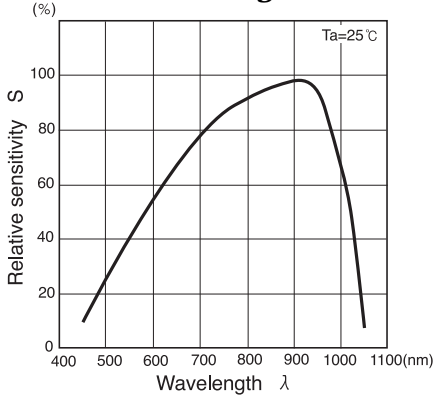
Short circuit current Vs. Illuminance



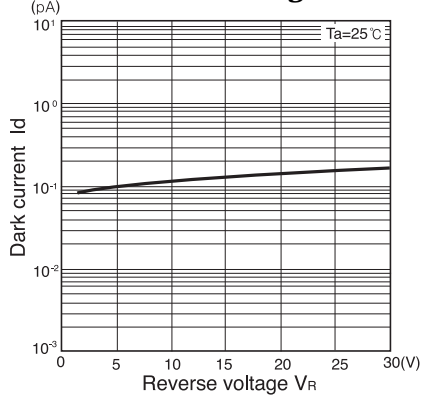
Dark current Vs. Ambient temperature



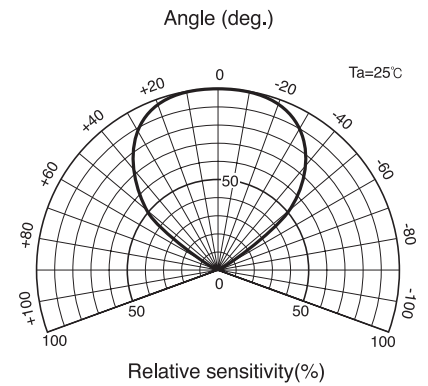
Relative sensitivity Vs. Wavelength



Dark current Vs. Reverse voltage



Radiant Pattern



Capacitance between terminals Vs. Reverse voltage

